

PUBLISHED ILLUSTRATIONS OF PENSTEMON
HIRSUTUS (SCROPHULARIACEAE):
MAGNIFICENCE, MALFORMATION
AND MISIDENTIFICATION

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Authors illustrating well-known plant species would do well to notice what has gone before them. As in the case of the various editions of Britton and Brown's *Illustrated Flora*, the accuracy of the illustrations has generally improved with time, but many authors persist in the presentation of imaginative drawings. The worst are probably in the popular wild flower guides and possibly have caused the frustration and disinterest of many prospective amateur botanists. *Penstemon hirsutus* (L.) Willd. has been pictured very often in both taxonomic and popular literature, and may be used to analyse the effectiveness of our attempts to illustrate nature.

The color plates of *P. hirsutus* by M. E. Eaton in the *National Geographic Magazine* (42:44, pl. 8, 1922) and in *Addisonia* (Pennell, Francis W., 1919, *Addisonia* 4:49, pl. 145) are excellent, although in the latter the staminode is a little too lightly bearded and the anther sacs are somewhat small. Excellent color plates are also found in Homer D. House's *Wild Flowers of New York* (72nd. Ann. Rept., Append. 2, New York State Museum, 1918) and in O. E. Jennings' *Wild Flowers of Western Pennsylvania and the Upper Ohio Basin* (vol. 2, pl. 140, University of Pittsburgh Press, Pittsburgh, 1953). The plate in Curtis's *Botanical Magazine* (t. 1424) is artistically pleasing and remarkably resembles the specimen in the Linnaean Herbarium, but is most atypical for the species as a whole.

Two photographs of the species taken by McFarland (Babb, Grace, 1951, *Introducing the Penstemons*, *Nat. Hort. Mag.* 30: 1-7) very beautifully show the habit of the plant as well as inflorescence detail. A photograph by Michael Carron (*Nat. Hort. Mag.* 15:149) is also excellent. A photograph of an inflorescence in George H. Hamilton's *Plants of the Niagara Park System* (Ryerson Press, Toronto, 1943) shows one flower very well, but all of the other flowers are poorly focused. Very excellent is the photograph of *P. hirsutus* in Herbert Durand's wild flower book (*Taming the Wildings*, G. P. Putnam's Sons, New York, 1923).

A very good illustration is presented by Edgar T. Wherry in his *Wild Flower Guide* (pl. 80, Doubleday & Co., Inc., 1948). The drawing of *Penstemon hirsutus* flowers in Norman C. Fassett's *Spring Flora of Wisconsin* (fig. 350, University of Wisconsin Press, ed. 3, 1959) shows

the upcurving of the lower lip and is generally good. *The MacMillan Wild Flower Book* (Hylander, Clarence J., 1954, The MacMillan Co., New York) gives an acceptable likeness of *P. hirsutus* as "hairy beardtongue." The drawing of this species in George Lincoln Walton's *Flower Finder* (opp. page 242, J. B. Lippincott Co., Philadelphia, 1914) is good, but the calyx and leaf-toothing are wrong. The line drawing in Strausbaugh and Core's *Flora of West Virginia* (pt. 3:831, West Virginia University Bulletin, Morgantown, 1958) is not badly done. The general shape of the anther sacs is adequately portrayed, at least for comparative purposes.

The worst drawing I have seen is in the first and second editions of Britton and Brown's *Illustrated Flora of the Northern United States, Canada and the British Possessions* (Charles Scribner's Sons, New York, 1898, 1913). *The New Britton and Brown Illustrated Flora* (Gleason, H. A., 1952, The New York Botanical Garden, New York) replaced it with a somewhat better drawing, which, however, shows no hairs on the orifice of the dissected corolla of *P. hirsutus*, though these are shown in the similarly dissected corolla of *P. tenuiflorus* Pennell, its closest relative. In fact, *this erroneous difference is the only notable difference between the two drawings.*

Fair line drawings are present in Ethel Hausman's *Illustrated Encyclopedia of American Wild Flowers* (Garden City Publ. Co., Garden City, N. Y., 1947) and Harold L. Madison's *Wild Flowers of Ohio* (Cleveland Museum of Natural History, Cleveland, 1938). The line drawing in Arthur Craig Quick's *Wild Flowers of the Northern States and Canada* (M. A. Donohue & Co., Chicago, 1939) is very poor; the leaves are entire and sheathing rather than serrate and sessile; the flowers are open, rather than closed by the upcurving of the lower lip. The Illinois Natural History Survey, in its *Field Book of Illinois Wild Flowers* (p. 305, Urbana, 1936) presents a most unsatisfactory drawing of *P. hirsutus*. The flowers are the wrong shape, being more like those of *Penstemon digitalis* Nutt.

George T. Stevens' *Illustrated Guide to the Flowering Plants* (Dodd, Mead & Co., 1910) contains an atrocious drawing of *P. hirsutus*, with flowers aborted and cauline leaves wrongly petiolate and improperly toothed. Norman Taylor's *Guide to the Wild Flowers* (Greenberg Publ., New York) purports to illustrate *P. hirsutus* (Fig. 795), but its illustration of "*Penstemon penstemon*" (Fig. 796) is much more like *P. hirsutus*. The illustration in F. Schuyler Mathews' *Field Book of American Wild Flowers* (G. P. Putnam's Sons, New York) is certainly drawn from a plant of *P. laevigatus*. The illustration in George T. Aiken's *Pioneering With Wildflowers* (publ. by author, 1935) is the scarlet-flowered *P. barbatus*!

In summary, it seems that some illustrations of *P. hirsutus* are magnificent, some malformed, and some misidentified. It is interesting to

note the large number of illustrations of this species, particularly in wild flower books. Although 9 other species of *Penstemon* in the eastern United States are closely related to *P. hirsutus*, and many are much more colorful, authors of wild flower books invariably choose the already over-illustrated Gray's Manual range species. A notable exception is Eula Whitehouse's *Texas Plants in Natural Color* (publ. by author, Dallas, 1948), which illustrates the native *Penstemon laxiflorus* Pennell.

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